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(71) Applicant and

(72) Inventor: MANESIS, Nick, J. [US/US]; 3091 Chardon-
nay Drive, Pleasanton, California 94566 (US).

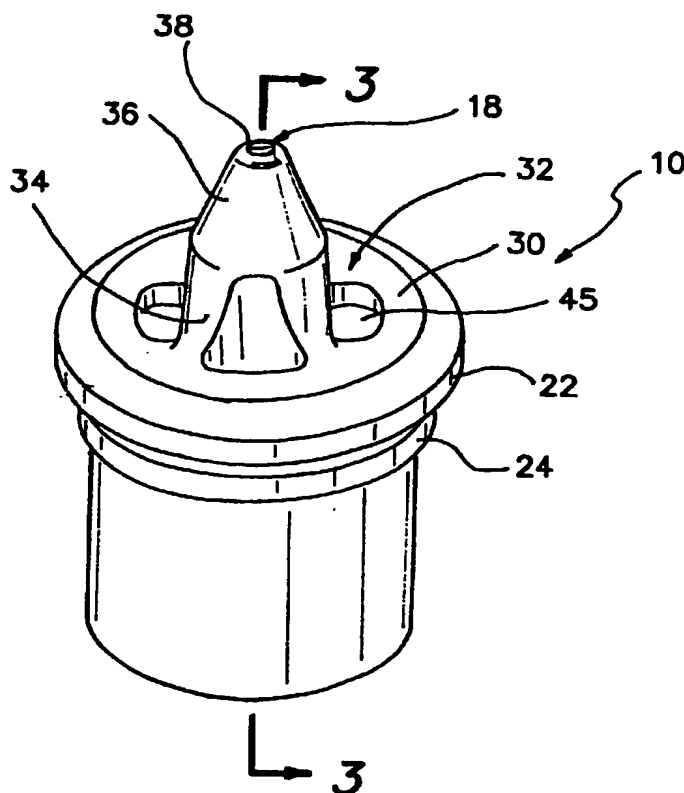
(74) Agent: UXA, Frank, J.; Stout, Uxa, Buyan & Mullins,
LLP, 4 Venture, Suite 300, Irvine, California 92618 (US).

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[Continued on next page]

(54) Title: MULTI-DOSE LIQUID DISPENSING ASSEMBLY



(57) Abstract: A dispensing assembly to be coupled to a resilient-walled vessel includes a tip defining an unobstructed bore positioned to be in direct communication with the vessel when coupled to the vessel. The tip includes a valve structured to allow drop-wise liquid dispensing when sufficient pressure is applied to the resilient wall of the vessel, and to prevent liquid back flow at zero as well as near zero pressure differentials across the valve. The assembly also includes at least one vent opening structured to allow air into and out of the vessel, and at least one filtration element extending across the vent opening. A cap having an antibacterial liner is also provided. The combination of the filtration element, the antibacterial liner in the cap, and the ability of the valve to prevent back flow enables the solution in the vessel to remain sterile, with no need for preservatives.



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A. CLASSIFICATION OF SUBJECT MATTER

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US CL : 222-212, 213, 422, 490-496; 604/294, 298

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,154,325 A (RYDER et al.) 13 October 1992 (13.10.1992), See entire document.	1-10,28-35,44-46,59-65,67,69-71,73-76 and 89-92
X	US 5,431,310 A (KANNER et al.) 11 July 1995 (11.07.1995), See entire document.	1-9,28-35 and 67
Y	US 5,154,325 A (RYDER et al.) 13 October 1992 (13.10.1992), See entire document.	11-27,36-43,47-58,66,68,72,77-88 and 93.105
Y	US 5,431,310 A (KANNER et al.) 11 July 1995 (11.07.1995), See entire document.	10-18,27,36-43,47-58,59-65 and 77-88
Y	US 4,533,068 A (MEIERHOEFER) 06 August 1985 (06.08.1985), See entire document.	43-46,59-65,73-76,89 and 90
Y	US 5,320,254 A (RANALLETTA et al.) 14 June 1994 (14.06.1994), See entire document.	1-9,28-35 and 67

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☐ See patent family annex.

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Facsimile No. (703) 305-3230

Authorized officer

Michael Y. Mar

Telephone No. (703) 308-0861